UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/973,069	10/10/2001	Johan Andersson	66848-0001-2	4674

25269 7590 03/26/2004

DYKEMA GOSSETT PLLC
FRANKLIN SQUARE, THIRD FLOOR WEST
1300 I STREET, NW
WASHINGTON, DC 20005

EXAMINER	
HAMILTON, MONPLAISIR G	

ART UNIT	PAPER NUMBER
2135	8

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/973,069	ANDERSSON ET AL.
	Examiner	Art Unit
	Monplaisir G Hamilton	2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10/10/01* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☑ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5,7.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-30 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 11/28/01, paper No. 5 and 1/24/03, paper No. 7 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the examiner is considering the information disclosure statements.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5404525 issued to Endicott et al, herein referred to as Endicott.

Referring to Claim 1:

Endicott discloses a method in a computer-iced system adapted for processing data associated with real world entities based on objects representing the real world entities, the method comprising: creating at least one formal instance, the at least one formal instance containing information regarding instantiation of at least one object (col 3, lines 20-35, 45-65); and associating the at least one formal instance with one or more formal instances or groups of formal instances based on information of the type of said at least one object or the at least one formal instance (col 5, line 55-col 6, line 10; col 7, lines 60-col 8, line 20).

Referring to Claim 2:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses instantiation of the at least one object based on the information contained in the at least one

formal instance and on information regarding at least one group with which the said at least one instance associates (col 8, line 55-col 9, line 16).

Referring to Claim 3:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses instantiation comprises creation of at least one real instance to be used by the computer system in said processing of data (col 12, lines 60-68).

Referring to Claim 4:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses creation of a plurality of groups of formal instances, the different groups of formal instances representing different types of objects (col 5, line 55-col 6, line 10).

Referring to Claim 5:

Endicott discloses the limitations of Claim 4 above. Endicott further discloses the groups are based on features of the real. world entities represented by the objects (col 5, lines 55-col 6, line 10).

Referring to Claim 6:

Endicott discloses the limitations of Claim 4 above. Endicott further discloses a group is based on functional features of the real world entities and another group is based on location of the real world entities (col 6, lines 1-30).

Referring to Claim 7:

Endicott discloses the limitations of Claim 4 above. Endicott further discloses the different groups of formal instances are arranged in structures based on the type of the objects the individual groups associate with (col 5, lines 45-68).

Referring to Claim 8:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses a formal instance is associated with a plurality of different groups of formal instances based on the type of the object the formal instance associates with (col 5, line 60-col 6, line 30).

Referring to Claim 9:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses at least one of the objects associates with at least one aspect (col 6, lines 1-30).

Referring to Claim 10:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses at least one of the formal instances associates with at least one aspect (col 6, lines 1-30).

Referring to Claim 11:

Endicott discloses the limitations of Claim 9 above. Endicott further discloses the step of changing the content of a set of aspects (col 13, lines 45-65).

Referring to Claim 12:

Endicott discloses the limitations of Claim 9 above. Endicott further discloses the at least one aspect is inherited (col 13, lines 45-68; col 6, lines 10-15).

Referring to Claim 13:

Endicott discloses the limitations of Claim 7 above. Endicott further discloses the structures describe the relations between different groups of formal instances (col 5, lines 35-60).

Referring to Claim 14:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses a formal instance represents a group of formal instances (col 5, lines 55-65).

Referring to Claim 15:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses selected formal instances or all formal instances of a group of formal instances represent said group of formal instances (col 5, line 55-col 6, line 10).

Referring to Claim 16:

Endicott discloses the limitations of Claim 2 above. Endicott further discloses instantiation of an object type results in instantiation of at least two objects associated with said object type (col 8, line 10-col 9, line 15).

Referring to Claim 17:

Endicott discloses the limitations of Claim 16 above. Endicott further discloses the objects to be instantiated are instantiated based on formal instances that belong to different groups of formal instances (col 13, lines 25-30).

Referring to Claim 18:

Endicott discloses the limitations of Claim 2 above. Endicott further discloses wherein instantiation of a composite object type results in instantiation of a group of objects (col 13, lines 40-68).

Referring to Claim 19:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses A method as claimed in claim 1, wherein a formal instance contains a description how to make changes to aspects of the objects to be instantiated (col 13, lines 1-35; col 15, lines 55-68).

Referring to Claim 20:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses the computerized system locates an object type indicative of an object to be instantiated, locates a formal instance in a first structure group describing the instantiation of the object, proceeds to create real instances out of all formal instances in said first structure group and other structure groups that are associated with said first structure group (col 13, lines 40-60).

Referring to Claim 21:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses the computerized system controls operation of a real world entity based on at least one object representing the entity and instantiated based on information contained in a formal instance (col 12, line 60-col 13, line 15).

Referring to Claim 22:

Endicott discloses the limitations of Claim 1 above. Endicott further discloses computer program comprising program code means for performing any of steps of claim 1 when run on a computer (col 5, lines 15-30).

Referring to Claim 23:

Endicott discloses the limitations of Claim 22 above. Endicott further discloses the program code means are stored in a computer readable medium (col 5, lines 10-35).

Referring to Claim 24:

Endicott discloses the limitations of Claim 22 above. Endicott further discloses using a computer program as claimed in claim 22 for controlling operation of real world entities (col 6, lines 1-30).

Referring to Claim 25:

Endicott discloses a method of controlling real world entities by means of a computerized control system based on objects representing the real world entities, the method comprising: creating a formal instance, the formal instance containing information regarding instantiation of at least one object (col 3, lines 20-35, 45-65); placing the formal instance in one or more groups of formal instances, the selected group or groups being indicative of the type of said at least one object (col 5, line 55-col 6, line 10; col 7, line 60-col 8, line 20); initiating instantiation of an object that is required by the control operations, the object being associated with the created formal instance (col 8, lines 55-68), wherein the step of initiation comprises obtaining information from the formal instance (col 8, lines 55-col 9, line 16); and instantiating the object based on said information and also information regarding the group or groups the formal instance is placed in (col 8, lines 55-col 9, line 16).

Referring to Claim 26:

Endicott discloses a method for instantiation of an object that represents a real world entity, comprising: generating a formal instance describing the instantiation of the object (col 3, lines 20-35, 45-65; col 7, lines 60-68); placing the formal instance into one or more groups of formal instances based on the type of the object (col 5, lines 55-col 6, line 10); and instantiating the object based on information in the formal instance and also on information of the type of the object (col 8, line 55-col 9, line 16).

Referring to Claim 27:

Endicott discloses a data processing system comprising: a data processor (col 5, lines 15-30); and storage means for storing data (col 5, lines 35-45), at least a part of said data being stored as objects that can be instantiated for use by the data processor (col 8, lines55-68), wherein the arrangement is such that at least a part of the objects are instantiated based on information contained in associated formal instances and information regarding the type of the object to be instantiated (col 8, line 55-col 9, line 16).

Referring to Claim 28:

Endicott discloses the limitations of Claim 26 above. Endicott further discloses controlling the operation of real world entities that are represented by objects to the system (col 6, lines 1-30).

Referring to Claim 29:

Endicott discloses a data entity for object oriented data processing that is based on use of a plurality of objects, wherein the data entity contains information regarding instantiation of one or more objects and is included in at least one group of data entities (col 5, lines 45-col 6, line 30), each group of data entities being indicative of different characteristic features of the objects (col 6, lines 1-20).

Referring to Claim 30:

Endicott discloses a method in a computerized system adapted for processing data associated with real world entities based on objects representing the real world entities, the method comprising: creating at least one formal instance, the at least one formal instance containing information regarding instantiation of at least one object (col 3, lines 20-35, 45-65); and associating the at least one formal instance with one or more formal instances or groups of formal instances based on information of the type of said at least one object or the at least one formal instance (col 5, line 55-col 6, line 10; col 7, lines 60-col 8, line 20); and controlling by the computerized system operation of a real world entity based on at least one object representing the real world entity (col 12, line 60-col 13, line 20) and instantiated based on information contained in a formal instance associated with said one or more formal instances or groups of formal instances (col 8, line 55-col 9, line 16).

Prior Art

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6169993 issued to Shutt, David R. et al. Shutt discloses an interface-based binary object system capable of supporting multiple interfaces into objects created by class templates, a repository of stored object states is formed that can be accessed by later created objects. Such later created objects may be of the same class as the original object or may be of a new class extended from the original class and still use the same stored object state. Access to the stored object state is made through a generic repository object that emulates the behavior of a

particular class of object as defined in type definitions. Requests to a particular object's properties through interface methods are serviced by having the generic repository object make reference to the type definitions in order to fulfill the request. Binary extensibility of the generic repository object along with proper class definition in the type definitions allows custom objects having greater functionality than that provided by the generic repository object to be implemented. Furthermore, class definitions that use only functionality provided by the generic repository object may be defined so as to allow instantiation of objects without the implementation of actual software code whatsoever. Finally, in a currently preferred embodiment, object state is stored advantageously in SQL database tables organized on a per-interface basis with properties common to all objects stored in a main stored object state table.

US 5280610 issued to Travis, Jr., Robert L. et al. Travis discloses The system for organizing communication among applications in a data processing network includes data bases and data base control means. The data bases include method entries, message entries, and class entries. Method entries refer to commands or other mechanisms used to invoke applications. Message entries each represent a type of operation, which can be performed on instances in a class, which correspond to that message and identify a method map, which contains one or more references to method entries stored in the data base. Class entries, each of which is unique in a data base, contain information about classes consisting of instances, which have common characteristics, as well as identifying a corresponding group of message entries. The data base control means includes an invoker for identifying a method entry corresponding to the instance identifier and type of operation identified in a request for remote invocation of an application,

and a dispatcher for transmitting the command identified in the method entry to the remote application. The system may include data bases in a data processing network comprised of one or more platforms or nodes and may be either global data bases accessible to the entire network or local data bases, each of which is accessible to only a part of the network.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monplaisir G Hamilton whose telephone number is (703) 305-5116. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on (703) 305-4393. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monplaisir Hamilton